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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,083	07/30/2003	Frank Zamora	HES 2003-IP-009930U1	8473

28857 7590 03/23/2005  
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EXAMINER
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GAY, JENNIFER HAWKINS

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/630,083

Applicant(s)

ZAMORA ET AL.

Examiner

Jennifer H Gay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-48 is/are rejected.
- 7) ☒ Claim(s) 9, 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/30/03, 8/28/03, 11/11/04, 12/6/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the conveyance string being a wireline as recited in claim 4, extending arms attached to a base of the sleeve as recited in claims 9, 10, 35, and 36, and a release mechanism as recited in claim 45 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The abstract of the disclosure is objected to because the abstract includes the implied phrase "are provided". Correction is required. See MPEP § 608.01(b).

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the

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printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The disclosure is objected to because of the following informalities: the Cross-Reference application data should be updated to indicate that US Application No. 10/352,809 has been abandon.

Appropriate correction is required.

### ***Claim Objections***

5. Claims 22, 32, and 47 are objected to because of the following informalities:

- Claim 22 is objected to because the examiner is not sure as to what extent of curing of the resin "substantially curing" entails; for the purposes of examination, the examiner is assuming that "substantially curing" is equivalent or close to completely curing the resin.
- Claim 32 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 32 recites that the sleeve is located within the interior of the carrier; this limitation is also recited in claim 29 from which claim 32 depends.
- Claim 47 is objected to because it appears that it should depend from claim 46 as claim 45 is a system claim while claim 47 is a method claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 5, 8, 11-16, 18, 20-22, 24, 28-32, 34, 37-44, and 46-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Nobileau (US 5,337,823).

*Regarding claim 1:* Nobileau discloses a method for placing a tubular sleeve in a wellbore. The method involves the following steps:

- Providing a carrier 7 configured to hold a tubular sleeve 5, 5' that includes a plurality of fibers in a braided arrangement.
- Positioning the sleeve within the carrier.
- Moving the carrier into the wellbore.

*Regarding claims 2, 3, 34:* An upper end of the carrier is attached to a conveyance string 21 that is tubing (Figure 5).

*Regarding claim 5:* The carrier is positioned near the bottom of the wellbore by lowering the carrier in the wellbore (Figure 8).

*Regarding claim 8:* The carrier may be placed between a lower end of the wellbore and an upper end of the wellbore (Figure 5).

*Regarding claims 11, 37, 38:* The sleeve is folded within the interior of the carrier (Figure 9).

*Regarding claim 12:* Though not specifically disclosed, movement of the carrier would inherently cause the sleeve to slightly unfold prior to the sleeve being positioned in the desired location.

*Regarding claims 13, 14, 39:* Injecting a pressurized fluid against the interior wall of the sleeve expands the sleeve.

*Regarding claim 15:* The fluid includes a curing agent (11:44-53).

*Regarding claims 16, 40:* An inflatable member 6 is located within the sleeve where the inflatable member is used to expand the sleeve.

*Regarding claims 18, 41:* The sleeve is impregnated with a curable resin prior to be running into the wellbore.

*Regarding claims 20, 42:* The curable resin includes a partially polymerized resin capable of being cured by heating (7:32-40).

*Regarding claims 21, 22:* The curable resin is completely cured after the sleeve is positioned in the wellbore. Though not specifically disclosed, the heat of the wellbore would inherently begin curing the resin as the sleeve is being run into the wellbore.

*Regarding claim 24:* Heating cures the resin.

*Regarding claim 28:* Curing the resin causes the sleeve to become impermeable.

*Regarding claims 29, 32:* Nobileau discloses a system for placing a tubular sleeve in a wellbore that includes a tubular sleeve 5, 5', which includes a plurality of braided fibers, and a carrier 7 where the sleeve is located within the carrier.

*Regarding claim 30:* The fibers can be glass (8:45-50).

*Regarding claim 31:* The carrier can be steel (Figures 4 and 5; the cross-hatching of the carrier 3 indicates that it is a metal and the most common metal used in wellbore tools is steel).

*Regarding claims 43, 44:* The carrier is circular after expansion and is sized to fit in the wellbore.

*Regarding claims 46-48:* Nobileau discloses a method for loading a flexible sleeve in a carrier where the method involves positioning the sleeve in an undeployed state within the interior of the carrier, conveying the carrier into the wellbore, and deploying the sleeve.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nobileau (US 5,337,823) in view of Song et al. (US 5,833,001).

Nobileau discloses all of the limitations of the above claims except for the conveyance string being a wireline.

Song et al. discloses a system that is similar to that of Nobileau. Song et al. further teaches running the sleeve and carrier into the wellbore on either a tubing string or a wireline (3:43, 44).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the system of Nobileau such that the conveyance string was a wireline as taught by Song et al. in order to have eliminated the need for pipe handling equipment.

Further, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the system of Nobileau such that the conveyance string was a wireline, since the examiner takes Official Notice of the equivalence of tubing strings and wireline for their use in the wellbore tool conveyance art and the selection of any of these known equivalents to run the sleeve and carrier into the wellbore would be within the level of ordinary skill in the art as evidenced by Song et al.

10. Claims 6, 7, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nobileau (US 5,337,823) in view of Whanger et al. (US 6,834,725).

*Regarding claims 6, 7, 35:* Nobileau discloses all of the limitations of the above claims except for the system including an anchor attached to the base of the sleeve for securing the sleeve to the wellbore.

Whanger et al. discloses a method for expanding tubing in a wellbore. Whanger et al. further teaches securing an anchor **300** (Figure 7) to the bottom of the expandable tubing. It is noted that element **300** is disclosed as a sealing element but as the tubing is not hung from a tubing string, the sealing element would function as an anchor for the tubing.

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It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the system of Nobileau to include an anchor as taught by Whanger et al. in order to have ensured that the expanded sleeve was secured to the wellbore and would not move once the expanding fluid was removed from the sleeve.

*Regarding claim 36:* The anchor of Whanger et al. is made up of metal and an elastomer material.

11. Claims 17, 19, and 23 are rejected under 35 U.S.C. 103(a) as being obvious over Nobileau (US 5,337,823) in view of Kalman et al. (US 2004/0144535).

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

*Regarding claim 17:* Nobileau discloses all of the limitations of the above claims except for expanding the sleeve by running a mandrel therethrough.

Kalman et al. discloses a method and system similar to that of Nobileau. Kalman et al. further teaches expanding the disclosed sleeve using either fluid pressure or a mandrel (paragraph [0037]).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the method and system of Nobileau such that the sleeve was expanded using a mandrel as taught by Kalman et al. in order to have eliminated the equipment necessary for introducing fluid pressure to the sleeve.



Further, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the method and system of Nobileau such that the sleeve was expanded using a mandrel, since the examiner takes Official Notice of the equivalence of fluid pressure and an expansion mandrel for their use in the wellbore tubular expansion art and the selection of any of these known equivalents to expand the sleeve of Nobileau would be within the level of ordinary skill in the art as evidenced by Kalman et al.

*Regarding claims 19, 23:* Nobileau discloses all of the limitations of the above claims except for treating the sleeve with the curable resin after the sleeve has been run into the wellbore.

Kalman et al. further teaches that a curable resin can be introduced to the sleeve after the sleeve has been run into the wellbore (paragraph [0034]).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the method and system of Nobileau so that the curable resin was introduced to the sleeve after the sleeve was run into the wellbore as taught by Kalman et al. in order to have prevented the curable resin from setting before the sleeve has been positioned at the desired location in the wellbore.

12. Claims 25-27, 33, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nobileau (US 5,337,823) in view of Bertet et al. (US 5,695,008).

*Regarding claims 25, 33, 45:* Nobileau discloses all of the limitations of the above claims except for releasing the sleeve from the carrier and removing the carrier from the wellbore.

Bertet et al. discloses a method and system similar to that of Nobileau. Bertet et al. further teaches running a sleeve into the wellbore on a carrier 7 that is released from the sleeve and removed from the wellbore (Figures 10-10D).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the method and system of Nobileau so that the carrier was released from the sleeve and removed from the wellbore as taught by

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Bertet et al. in order to have reduced the cost of completely casing the wellbore by being able to reuse the carrier in each successive run.

*Regarding claim 26:* The carrier of Bertet et al. can be reloaded with another sleeve (1:66-2:4).

*Regarding claim 27:* A drilling can be passed through the sleeve of Nobileau and a distance below the sleeve drilled (11:3-6).

*Regarding claim 45:* Though Bertet et al. does not disclose a specific release mechanism such a device must be included in order for the carrier to be removed from the sleeve.

### ***Allowable Subject Matter***

13. Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

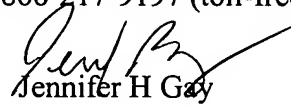
The remaining references made of record disclose various expandable wellbore tubulars.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jennifer H Gay  
Patent Examiner  
Art Unit 3672

JHG   
March 07, 2005